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Chief of Naval Operations

A/S32M-14 AND A/S32M-17, AIRCRAFT MAINTENANCE CRANES, N88-NTSP-A-50-8410B/A

(a) OPNAVINST 1500.76

1. Subject NTSP is approved and forwarded per reference (a).

2. Subsequent NTSP review will examine both the effectiveness and efficiency of training outlined in this document.

3. OPNAV point of contact is AZC (AW) M. S. Dean (N889H7), DSN 664-7714, Comm: (703) 604-7714.

T. M. VANDENBERG
Captain, U.S. Navy
Head, Aviation Technical Training Section

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# APPROVED

# NAVY TRAINING SYSTEM PLAN

**FOR THE**

# A/S 32M-14 and A/S 32M-17

# AIRCRAFT MAINTENANCE CRANES

# N88-NTSP-A-50-8410B/A

# MARCH 2000

# A/S 32M-14 and A/S 32M-17 AIRCRAFT MAINTENANCE CRANES

## EXECUTIVE SUMMARY

The A/S 32M-14 and A/S 32M-17 Aircraft Maintenance Cranes, developed by Pettibone Corporation and Entwistle Company, are used to support maintenance performed on various Navy and Marine Corps aircraft. The A/S 32M-14 reached Initial Operating Capability (IOC) in January 1990. The A/S 32M-17 reached IOC in July 1993. The A/S 32M-14 and A/S 32M-17 are currently in Phase III - Production, Deployment, and Operational Support of the Weapons System Acquisition Process. The A/S 32M-14 and the A/S 32M-17 are self-propelled, 14.5 ton transportable cranes with an 8.5 ton lift capacity. Both cranes are used by the Navy and Marine Corps to provide access to aircraft components for the performance of maintenance functions, either by lifting components for removal and replacement, or by lifting personnel to an advantage point for maintenance and inspection purposes.

Local Aircraft Intermediate Maintenance Departments and Marine Aviation Logistics Squadrons provide A/S 32M-14 and A/S 32M-17 organizational level maintenance and operator training. The A/S 32M-14 and A/S 32M-17 organizational level maintenance is performed by Navy and Marine Corps aviation maintenance personnel from various ratings who have attended the Aircraft Maintenance Crane Operator courses (C-600-3211 and C-600-3332) and who possess a valid Support Equipment Operator License. Depot level maintenance is performed at Naval Aviation Depots (NAVAVNDEPOT) Naval Air Station (NAS) North Island and NAVAVNDEPOT Marine Corps Air Station Cherry Point.

Intermediate level maintenance is performed by Aviation Support Equipment Technicians (AS) with Navy Enlisted Classification (NEC) 7616 and Marine Corps Ground Support Equipment Mechanics with Military Occupational Specialty (MOS) 6072. Formal intermediate level maintenance follow-on training for the A/S 32M-14, course C-602-3267, is provided to Navy personnel at Maintenance Training Unit (MTU) 3033, Naval Aviation Maintenance Training Group Detachment (NAMTRAGRU DET) NAS North Island, California, and MTU 3032, NAMTRAGRU DET NAS Jacksonville, Florida. Follow-on training for the A/S 32M-17, course C-602-3287, is currently provided to Navy personnel at these same activities. Production units of the crane are used as technical training equipment.

Marine Corps intermediate level personnel with MOS 6072 receive on-the-job training on both the A/S 32M-14 and A/S 32M-17; i.e., no formal training is required.

# A/S 32M-14 and A/S 32M-17 AIRCRAFT MAINTENANCE CRANES

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## A/S 32M-14 and A/S 32M-17 AIRCRAFT MAINTENANCE CRANES

## LIST OF ACRONYMS

| | |
|---|---|
| AIMD | Aircraft Intermediate Maintenance Department |
| AMIST | Aviation Maintenance In-Service Training |
| AMTCS | Aviation Maintenance Training Continuum System |
| AS | Aviation Support Equipment Technician |
| CBT | Computer-Based Training |
| CM | Corrective Maintenance |
| FY | Fiscal Year |
| ILSP | Integrated Logistics Support Plan |
| IOC | Initial Operating Capability |
| MAG | Marine Aircraft Group |
| MALS | Marine Aviation Logistics Squadron |
| MATMEP | Maintenance Training Management and Evaluation Program |
| MCAS | Marine Corps Air Station |
| MOS | Military Occupational Specialty |
| MTIP | Maintenance Training Improvement Program |
| MTU | Maintenance Training Unit |
| NA | Not Applicable |
| NATEC | Naval Air Technical Data and Engineering Service Command |
| NAF | Naval Air Facility |
| NAMTRAGRU | Naval Aviation Maintenance Training Group |
| NAMTRAGRU DET | Naval Aviation Maintenance Training Group Detachment |
| NAS | Naval Air Station |
| NAVAVNDEPOT | Naval Aviation Depot |
| NAWCAD | Naval Air Warfare Center Aircraft Division |
| NEC | Navy Enlisted Classification |
| NTSP | Navy Training System Plan |
| OPEVAL | Operational Evaluation |
| OPNAVINST | Office of the Chief of Naval Operations Instruction |
| OPO | OPNAV Principal Official |
| PICA | Primary Inventory Control Activity |

## A/S 32M-14 and A/S 32M-17 AIRCRAFT MAINTENANCE CRANES

## LIST OF ACRONYMS

| | |
|---|---|
| PM | Preventive Maintenance |
| SE | Support Equipment |
| SETD | Systems Engineering Test Directorate |
| TD | Training Device |
| TECHEVAL | Technical Evaluation |
| TFMMS | Total Force Manpower Management System |
| TTE | Technical Training Equipment |
| ULSS | User Logistic Support Summary |

## A/S 32M-14 and A/S 32M-17 AIRCRAFT MAINTENANCE CRANES

## PREFACE

This Approved Navy Training System Plan (NTSP) for the A/S 32M-14 and A/S 32M-17 Aircraft Maintenance Cranes updates the Draft NTSP, A-50-8410B/P, dated August 1999. This version incorporates comments received from the fleet; specifically, incorporation of the approved follow-on training course for the A/S 32M-17 (CIN C-602-3287) and updated Points of Contact.

# PART I - TECHNICAL PROGRAM DATA

## A. NOMENCLATURE-TITLE-PROGRAM

**1. Nomenclature-Title-Acronym.** A/S 32M-14 and A/S 32M-17 Aircraft Maintenance Cranes

**2. Program Element.** 24161N

## B. SECURITY CLASSIFICATION

**1. System Characteristics** ..... Unclassified
**2. Capabilities** ..... Unclassified
**3. Functions**..... Unclassified

## C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

OPNAV Principal Official (OPO) Program Sponsor..... CNO (N881B)

OPO Resource Sponsor ..... CNO (N881B)

Marine Corps Program Sponsor..... CMC (ASM-1)

Developing Agency ..... NAVAIRSYSCOM (PMA260)

Training Agency ..... CINCLANTFLT
CINCPACFLT
CNET
COMNAVAIRESFOR

Training Support Agency..... NAVAIRSYSCOM (PMA205)
COMNAVAIRESFOR

Manpower and Personnel Mission Sponsor..... CNO (N12)
NAVPERSCOM (PERS-4, PERS-404)

Director of Naval Training ..... CNO (N7)

Commander, Reserve Program Manager..... COMNAVAIRESFOR (N4333)

Marine Corps Combat Development Command
Force Structure Management..... TFS Division

## D. SYSTEM DESCRIPTION

**1. Operational Uses.** The A/S 32M-14 and A/S 32M-17 Aircraft Maintenance Cranes, hereafter referred to as the A/S 32M-14 and A/S 32M-17 cranes, are used ashore to provide lifting support to perform maintenance on the CH-46D/E, CH-53D/E, RH-53D, MH-53E, AV-8B, KC-130F, and P-3B/C aircraft. The primary mission of the A/S 32M-14 and A/S 32M-17 cranes is to provide the lifting force required to remove and replace aircraft components. Special missions include support of the quick transmission assembly change for the CH-53E helicopter and disassembly of the RH-53D minesweeping helicopter for transportation in C-5 aircraft.

The A/S 32M-14 and A/S 32M-17 cranes have the capability of using an aerial fiberglass bucket for supporting two aviation maintenance personnel while performing maintenance actions. Additionally, the A/S 32M-14 and A/S 32M-17 cranes can be used as utility vehicles to reposition equipment as required and to lift components to and from shipping containers and vehicles.

**2. Foreign Military Sales.** Not Applicable (NA)

## E. DEVELOPMENTAL TEST AND OPERATIONAL TEST

**1. A/S 32M-14 Crane.** Technical Evaluation (TECHEVAL) was conducted from February 1981 to March 1982 at the Naval Air Warfare Center Aircraft Division (NAWCAD) Patuxent River, Maryland, by the Systems Engineering Test Directorate (SETD). The configuration baseline of the A/S 32M-14 crane was established after resolving minor design deficiencies cited during the TECHEVAL. No Operational Evaluation (OPEVAL) was required.

**2. A/S 32M-17 Crane.** TECHEVAL was conducted in August 1992 by the SETD at NAWCAD Patuxent River. The configuration baseline of the A/S 32M-17 crane was established after resolving minor design deficiencies cited during the TECHEVAL. No OPEVAL was required.

## F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. NA

## G. DESCRIPTION OF NEW DEVELOPMENT

**1. Functional Description.** The A/S 32M-14 and A/S 32M-17 cranes are self-contained units capable of lifting 17,000 pounds at a working radius of 10 feet, and 3,300 pounds with the boom fully extended to a working radius of 39 feet. Telescoping, elevating, and swinging the boom, as well as operation of the winch, are accomplished through the use of hydraulics. A computerized overload warning system warns the operator of craning conditions that approach safety limits. Independently controlled and hydraulically operated outriggers provide stabilization. The A/S 32M-14 and A/S 32M-17 cranes are divided into seven major assemblies or subassemblies, as follows:

**a. Carrier Assembly.** The carrier assembly supports the engine, transmission, drive axles, and wheel assemblies. It consists of a fabricated steel frame incorporating axle housings, mounts, wheel assemblies, a boom support swing-circle base, a rear-end hook, and outrigger assemblies.

**b. Crane Assembly.** The crane assembly provides the crane's lifting action. The crane assembly consists of a fully revolving base with pedestal-type boom support, a sectional extendible boom, wire rope drum, wire rope, hook block, sheaves, rope guards, bucket, and operating controls.

**c. Hydraulic System.** The hydraulic system provides the pressure necessary for the crane to achieve the lifting capability of 8-1/2 tons. The hydraulic system includes pumps, hydraulic rams, strainers, reservoir, pressure relief valves, hose assemblies, lockouts, restrictors, and control valves to ensure positive control of the boom hoist and rope hoist in all operations including loss of hydraulic power.

**d. Brake Systems.** The brake system consists of a mechanical parking brake which provides a locking device to the transmission output shaft to achieve two wheel emergency braking operation, and hydraulically operated conventional drum type service brakes at all four wheels for normal braking operation.

**e. Propulsion System.** Power to operate the crane and vehicle is supplied by the conventional drive train and a four-cylinder internal combustion diesel engine as described in the following:

**(1) A/S 32M-14 Crane.** The A/S 32M-14 crane uses a conventional drive train consisting of a six-speed Clarke automatic transmission, driven by a torque converter and a four-cylinder internal combustion Detroit diesel engine.

**(2) A/S 32M-17 Crane.** The A/S 32M-17 crane uses a conventional drive train consisting of a three-speed Clarke automatic transmission, driven by a torque converter and a four-cylinder internal combustion Cummins diesel engine.

**f. Control and Electrical System.** Electrical and craning control power is provided by a conventional electrical system. The electrical circuit provides power for starting, lighting, instrumentation, and electro-hydraulics. The control and electrical system includes engine and transmission temperature and pressure sensors, wiring harness, instrument panel gages, intercom system and controls, and switches which monitor the starting and operation of the unit.

**g. Steering System.** Steering capability is accomplished at all four wheels by two independent steering systems. The front wheel steering is provided by a conventional steering wheel. An angle sensor mounted on the front wheels provides the rear wheel steering. Rear steering is used primarily to maneuver the crane in close, where minimum clearance is allowed.

The steering system includes the operator's steering wheel assembly and engine driven power steering pump.

**2. Physical Description.** Physical descriptions of the A/S 32M-14 and A/S 32M-17 cranes are the same for each and have the following dimensions:

| | | |
|---|---|---|
| Weight…… | 29,000 | pounds (maximum) |
| Width……. | 96 | inches (maximum) |
| Length (boom fully retracted)…… | 27 | feet (maximum) |
| Length (boom fully extended)…… | 48.5 | feet |
| Height (boom in travel position)… | 132 | inches (maximum) |
| Ground Clearance…….. | 13.5 | inches |

**3. New Development Introduction**

**a. A/S 32M-14 Crane.** The A/S 32M-14 crane was introduced to the fleet as a new production item. Delivery was completed in July 1983.

**b. A/S 32M-17 Crane.** The A/S 32M-17 crane was designed to augment the existing A/S 32M-14 crane and delivery to the Navy inventory was completed in August 1993.

**4. Significant Interfaces.** NA

**5. New Features, Configurations, or Material.** NA

## H. CONCEPTS

**1. Operational Concept.** The A/S 32M-14 and A/S 32M-17 cranes are operated, ashore only, by a minimum of two licensed active duty or reserve Navy or Marine Corps aviation maintenance personnel to provide support for aircraft maintenance. Licenses are obtained by attending an operator's course at the local Aircraft Intermediate Maintenance Department (AIMD) or Marine Aviation Logistics Squadron (MALS). The primary operator is positioned in the cab and performs the maneuvering and craning operations. The second person acts as the director and safety observer, providing the necessary hand signals.

**2. Maintenance Concept.** A/S 32M-14 and A/S 32M-17 crane maintenance is performed per Office of the Chief of Naval Operations Instruction (OPNAVINST) 4790.2G, Naval Aviation Maintenance Program, which is based upon three levels of maintenance: organizational, intermediate, and depot.

**a. Organizational.** Aviation maintenance ratings of operating units perform organizational level maintenance on a day to day basis in support of their own mission.

**(1) Preventive Maintenance.** Licensed personnel in various aviation maintenance ratings perform Preventive Maintenance (PM) that is confined to pre-operational and post-operational inspections, daily inspections, and limited servicing per the Maintenance Requirement Cards.

**(2) Corrective Maintenance.** Organizational level Corrective Maintenance (CM) is not authorized.

**b. Intermediate.** Navy AS personnel with Navy Enlisted Classification (NEC) 7616 at AIMDs and Marine Corps personnel with Military Occupational Specialty (MOS) 6072 in the MALS Support Equipment (SE) Division are responsible for maintenance performed in the day to day support of the A/S 32M-14 and A/S 32M-17 cranes.

**(1) Preventive Maintenance.** PM includes pre-operational inspections, periodic inspections, cleaning, and servicing.

**(2) Corrective Maintenance.** CM includes fault isolation, testing, adjustments, repair, removal, and replacement actions per Maintenance Instructional Manuals. Both the A/S 32M-14 and A/S 32M-17 cranes are under the Support Equipment Quick Engine Change Program. If the engine requires replacement, the engine and transmission are removed and replaced as one assembly with all external components remaining in place. If a transmission requires replacement, the transmission may be removed and replaced in lieu of a complete assembly change. Maintenance on the starter motor is limited to inspection, removal, and replacement of brushes and solenoid. Maintenance on the alternator is limited to inspection, removal, and replacement of brushes, diode pack, and regulator. The AIMD or MALS personnel perform alignment and adjustment of the computerized overload warning system.

**c. Depot.** Depot level maintenance of the A/S 32M-14 and A/S 32M-17 cranes is performed at Naval Aviation Depots (NAVAVNDEPOTs) NAS North Island, California, and Marine Corps Air Station (MCAS) Cherry Point, North Carolina. Depot level maintenance consists of maintenance beyond the capability of intermediate maintenance activities. PM and CM actions include rework, overhaul, and repair of all major components, complete unit rebuilding, and equipment refurbishing. When the determination is made that an engine or transmission is beyond the capability of intermediate maintenance, both the engine and transmission will be removed as a quick engine change assembly and sent to the cognizant support equipment commercial engine rework facility.

**d. Interim Maintenance.** NA

**e. Life-Cycle Maintenance Plan.** Depot level maintenance includes a five-year cyclic rework, repair, or overhaul of all major components on the A/S 32M-14 and A/S 32M-17 cranes.

**3. Manning Concept.** The A/S 32M-14 and A/S 32M-17 cranes are operated by licensed active duty or reserve personnel in all Navy aviation ratings and all Marine Corps aviation

MOSs. Navy AS personnel with NEC 7616 and Marine Corps personnel with MOS 6072 perform intermediate level maintenance.

**4. Training Concept.** Operator and organizational level maintenance training courses (C-600-3211 and C-600-3332) for the A/S 32M-14 and A/S 32M-17 cranes are provided to all aviation maintenance ratings at local AIMDs and MALS. Intermediate level maintenance training for Navy personnel is provided through training track D/E-602-7065. Upon completion of training track D/E-602-7065, Navy personnel receive NEC 7616. MTU 3032, NAMTRAGRU DET NAS Jacksonville, Florida, and MTU 3033 NAMTRAGRU DET NAS North Island, California, conduct intermediate level maintenance training. Marine Corps intermediate level personnel with MOS 6072 receive on-the-job training on both the A/S 32M-14 and A/S 32M-17 cranes; i.e., no formal training is required.

Selected Reserve personnel may earn intermediate level maintenance NECs by attending formal training at NAMTRAGRU DETs providing a quota and funding are available, and the student is available to attend the training. Specific guidelines are contained in NAVPERS 18068F Volume II, Chapter IV, NEC.

**a. Initial Training.** Initial training on the A/S 32M-14 crane was completed between June 1982 and May 1986 by Pettibone Corporation. A one-week operator course was conducted in June 1982 at Pettibone Corporation in Rome, New York. Pettibone Corporation at NAS Norfolk, Virginia, conducted two consecutive one-week maintenance courses, in April 1983. Additionally, an instructor maintenance course was taught at NAMTRAGRU DET 3032, NAS Jacksonville, in May 1986.

The Entwistle Company in Hudson, Massachusetts, completed initial operator and intermediate maintenance training on the A/S 32M-17 crane in March 1992. Initial operators and the Entwistle Company conducted intermediate maintenance training for Integrated Logistics Support evaluation personnel, initial cadre, and Navy instructors.

**b. Follow-on Training.** The operator and maintenance curricula were developed by the Pettibone Corporation and Entwistle Company for the A/S 32M-14 and A/S 32M-17 cranes, respectively. The Naval Air Maintenance Training Group (NAMTRAGRU) made revisions to the course materials and implemented courses at AIMDs; MALS; MTU 3032, NAMTRAGRU DET NAS Jacksonville; and MTU 3033, NAMTRAGRU DET NAS North Island.

**(1) Operator.** Operator training courses C-600-3211 (A/S 32M-14 crane) and C-600-3332 (A/S 32M-17 crane) for organizational level personnel are four-day courses conducted by the local AIMD or MALS. No special NEC or MOS is required; however, a SE Operator License is required to operate the cranes. These courses have been developed by NAMTRAGRU and distributed to local AIMDs and MALS.

**(2) Maintenance.** The training track for the A/S 32M-14, A/S 32M-17 cranes also contains training for the A/S 48M-2/3 Shore-Based Aircraft Maintenance Platform. Refer to Navy Training Plan A-50-9405/A dated December 1993 for additional training information concerning the A/S 48M-2/3 Shore-Based Aircraft Maintenance Platform.

| | |
|---|---|
| **Title .....** | **(Ashore) Crash and Material Handling Equipment Intermediate Maintenance** |
| CIN ..... | D/E-602-7065 |
| Model Manager ... | MTU 3032, NAMTRAGRU DET NAS Jacksonville |
| Description ..... | This course provides Aviation Support Equipment Technicians knowledge and skills relevant to the A/S 32M-14 and A/S 32M-17 cranes, and A/S 48M-2/3 Shore-Based Aircraft Maintenance Platform. Graduates will have the ability to perform intermediate maintenance in the AIMD environment under limited supervision; including knowledge of proper procedures for safety, operational checkout, corrosion control, troubleshooting, periodic maintenance, component removal, repair and replacement, use of power tools and test equipment, and use of publications. |
| Location ..... | MTU 3032, NAMTRAGRU DET NAS Jacksonville<br>MTU 3033, NAMTRAGRU DET NAS North Island |
| Length ..... | 72 days |
| RFT date ..... | Currently available |
| Skill identifier ..... | AS 7616 |
| TTE/TD ..... | Major Technical Training Equipment (TTE) consist of A/S 32M-14, A/S 32M-17, and A/S 48M-2/3 cranes. Refer to Part IV for other applicable TTE. There are no Training Devices (TD). |
| Prerequisite ..... | C-602-2026, Aviation Support Equipment Technician Class A1 |

**c. Student Profiles**

| SKILL IDENTIFIER | PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS |
|---|---|
| AS 7616 | ° C-602-2026, Aviation Support Equipment Technician Class A1 |

| SKILL IDENTIFIER | PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS |
|---|---|
| MOS 6072 | ° C-602-2026, Aviation Support Equipment Technician Class A1<br>° D/E-602-7040, Support Equipment Engine/Gas Turbine and Related Systems Intermediate Maintenance |

**d. Training Pipelines.** Intermediate Maintenance Courses, C-602-3267, C-602-3287, and C-602-3291 have been combined to make a new track D/E-602-7065 which awards NEC 7616.

## I. ON-BOARD (IN-SERVICE) TRAINING

### 1. Proficiency or Other Training Organic to the New Development

**a. Maintenance Training Improvement Program.** The Maintenance Training Improvement Program (MTIP) is used to establish an effective and efficient training system responsive to fleet training requirements. MTIP is a training management tool that, through diagnostic testing, identifies individual training deficiencies at the organizational and intermediate levels of maintenance. MTIP is the comprehensive testing of one's knowledge. It consists of a bank of test questions managed through automated data processing. The Deputy Chief of Staff for Training assisted in development of MTIP by providing those question banks (software) already developed by the Navy. MTIP was implemented per OPNAVINST 4790.2 series. MTIP allows increased effectiveness in the application of training resources through identification of skills and knowledge deficiencies at the activity, work center, or individual technician level. Refresher training is concentrated where needed to improve identified skill and knowledge shortfalls. MTIP will be replaced by the Aviation Maintenance Training Continuum System (AMTCS). Current planning is for AMTCS to begin full implementation for fleet deployment on 1 October 2000.

COMNAVAIRPAC has discontinued using MTIP. They are currently using maintenance data products as a source to determine maintenance training deficiencies until AMTCS is implemented.

**b. Aviation Maintenance Training Continuum System.** AMTCS will provide career path training to the Sailor or Marine from their initial service entry to the end of their military career. AMTCS is planned to be an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. By capitalizing on technological advances and integrating systems and processes where appropriate, the right amount of training can be provided at the right time, thus meeting the CNO’s mandated “just-in-time” training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: Computer-Based Training (CBT) for the technicians in the Fleet in the form of Interactive Courseware (ICW) with Computer Managed Instruction (CMI) and Computer Aided Instruction (CAI) for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System - Software Module (ASM) which provides testing [Test and Evaluation (TEV)], recording [Electronic Training Jacket (ETJ)], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the technicians perform, and the tasks are stored and maintained in a Master Task List (MTL) data bank. These tools are procured and fielded with appropriate COTS hardware and software, i.e., Fleet Training Devices (FTD) - Laptops, PCs, Electronic Classrooms (ECR), Learning Resource Centers (LRC), operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N889H), AMTCS is to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing MTIP and Maintenance Training Management and Evaluation Program (MATMEP) programs.

**2. Personnel Qualification Standards.** NA

**3. Other On-Board or In-Service Training Packages.** Marine Corps on-board training is based on the current series of MCO P4790.12, Individual Training Standards System and Maintenance Training Management and Evaluation Program (MATMEP). This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 series, maintenance training requirements. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. MTIP questions coupled to MATMEP tasks will help identify training deficiencies that can be enhanced with refresher training. MATMEP will be replaced by AMTCS in approximately FY02.

## J. LOGISTICS SUPPORT

### 1. Manufacturer and Contract Numbers

| CONTRACT NUMBER | MANUFACTURER | ADDRESS |
|---|---|---|
| A/S 32M-14 Crane<br>N000140-80-C-0464 | Pettibone Corporation | Pettibone Corporation<br>1212 Dominic Street<br>Rome, NY 13440 |

| CONTRACT NUMBER | MANUFACTURER | ADDRESS |
|---|---|---|
| A/S 32M-17 Crane<br>N000140-88-C-RJ36 | Entwistle Company | The Entwistle Company<br>Bigelow Street<br>Hudson, MA 01749 |

**2. Program Documentation**

**a. A/S 32M-14 Crane.** The Integrated Logistics Support Plan (ILSP), CSE-0418: AA, and Maintenance Plan, MAPL-CSE-0418: RB, were developed by the NAWCAD Lakehurst in October and November 1981. The Operational Logistics Support Plan, SE-0418:AA, was revised in October 1984; the Maintenance Plan was revised in October 1985 and approved in June 1986.

**b. A/S 32M-17 Crane.** The ILSP, CSE-0645: AA was developed by the NAWCAD Lakehurst in April 1988. The NAWCAD Lakehurst developed the A/S 32M-17 Maintenance Plan, MaPl-CSE-0645, in December 1993 and the User Logistics Support Summary (ULSS) CSE-0645 in June 1994.

**3. Technical Data Plan.** All technical manuals are available. Refer to element IV.B.3 for a list of technical manuals required at the training sites.

**4. Test Sets, Tools, and Test Equipment.** All PM and CM for the A/S 32M-14 and the A/S 32M-17 cranes is performed with common hand tools.

**5. Repair Parts.** The Navy is the Primary Inventory Control Activity (PICA) in the procurement of the A/S 32M-14 and A/S 32M-17 cranes. The Naval Inventory Control Point, located in Mechanicsburg, Pennsylvania, performs the PICA functions and provisions the necessary spares and repair parts. The Material Support Dates for the A/S 32M-14 and A/S 32M-17 cranes were October 1984 and August 1996, respectively.

**6. Human Systems Integration.** NA

## K. SCHEDULES

**1. Installation and Delivery Schedules.** The A/S 32M-14 and A/S 32M-17 cranes delivery is complete. The following table shows the number of cranes at each location per the Support Equipment Resources Management Information System as of October 1997.

| ACTIVITY | A/S 32M-14 | A/S 32M-17 |
|---|---|---|
| NAS NAMTRAGRU DET Jacksonville | 1 | 1 |
| NAMTRAGRU DET NAS North Island | 1 | 1 |

| ACTIVITY | A/S 32M-14 | A/S 32M-17 |
|---|---|---|
| NAS Norfolk | 3 | 0 |
| NAS Jacksonville | 1 | 1 |
| Naval Station Roosevelt Roads, Puerto Rico | 1 | 0 |
| Marine Aircraft Group (MAG) 14 MCAS Cherry Point | 5 | 0 |
| MAG 26 MCAS New River | 6 | 0 |
| MAG 29 MCAS New River | 4 | 1 |
| Marine Aircraft Wing 2 MCAS Cherry Point | 2 | 0 |
| NAS Sigonella, Italy | 2 | 0 |
| Naval Test Wing Atlantic, NAWCAD Patuxent River | 2 | 2 |
| Naval Weapon Test Squadron China Lake | 2 | 0 |
| Naval Surface Warfare Center Coastal Systems Station Dahlgren Division Panama City | 1 | 0 |
| NAVAVNDEPOT NAS Jacksonville | 0 | 1 |
| NAS North Island | 2 | 1 |
| NAS Barbers Point | 1 | 0 |
| NAS Whidbey Island | 0 | 1 |
| MAG 13 MCAS Yuma | 2 | 2 |
| MAG 11 MCAS Miramar | 1 | 0 |
| MAG 16 MCAS Miramar | 6 | 0 |
| MAG 36 MCAS Futenma, Japan | 3 | 0 |
| MAG 39 MCAS Camp Pendleton | 2 | 0 |
| MAG 12 MCAS Iwakuni, Japan | 1 | 0 |
| MAG 24 MCAS Kaneohe Bay | 2 | 0 |
| Strategic Communication Wing Tinker AFB | 1 | 0 |
| Naval Air Facility (NAF) Atsugi, Japan | 1 | 0 |
| MCAS Yuma | 1 | 0 |
| NAF Misawa, Japan | 1 | 0 |
| Naval Support Facility Diego Garcia | 1 | 0 |
| Naval Air Force Pacific Fleet Response Pool NAS North Island | 0 | 1 |

| ACTIVITY | A/S 32M-14 | A/S 32M-17 |
|---|---|---|
| NAS Joint Reserve Base Willow Grove | 1 | 0 |
| NAF Andrews Air Force Base | 0 | 1 |
| NAS Joint Reserve Base New Orleans | 1 | 0 |
| MALS 49 MCAS Newburgh | 0 | 1 |
| NAS Santa Clara Naval Air Reserve Moffett Field | 1 | 0 |
| NAS Joint Reserve Base Fort Worth | 1 | 1 |
| Blount Island Command, Jacksonville | 0 | 12 |
| Naval Supply Center Cheatham Maritime Preposition Ships Aviation Ground Support Equipment | 0 | 1 |
| Naval Aviation Logistics Center Ground Support Equipment, Solomons | 0 | 1 |
| **Total** | **60** | **29** |

**2. Ready For Operational Use Schedule.** The A/S 32M-14 and A/S 32M-17 cranes are Ready For Operational Use upon delivery.

**3. Time Required to Install at Operational Sites.** NA

**4. Foreign Military Sales and Other Source Delivery Schedule.** NA

**5. Training Device and Technical Training Equipment Delivery Schedule.** Shipments of the A/S 32M-14 and A/S 32M-17 cranes were completed as of July 1983 and March 1994, respectively, to MTU 3032 and MTU 3033. Refer to Part IV for applicable TTE. TD is NA.

## L. GOVERNMENT FURNISHED EQUIPMENT AND CONTRACTOR FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA

## M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

| DOCUMENT OR NTSP TITLE | DOCUMENT OR NTSP NUMBER | PDA CODE | STATUS |
|---|---|---|---|
| A/S 32A-35/36 CV Crash Crane and Amphibious Assault Crash Crane | A-50-8110C/A | PMA260 | Approved Jun 98 |

| DOCUMENT OR NTSP TITLE | DOCUMENT OR NTSP NUMBER | PDA CODE | STATUS |
|---|---|---|---|
| A/S 48M-2/3 Shore-Based Aircraft Maintenance Platforms | A-50-9405/A | PMA260 | Approved Dec 96 |
| A/S 32M-14 Multi-purpose Aircraft Component Maintenance Crane ILSP | CSE-0418:AA | PMA260 | Approved Oct 81 |
| A/S 32M-14 Maintenance Plan | MAPL-CSE-0418:RB Rev. B | PMA260 | Approved Jun 86 |
| A/S 32M-14 Operational Logistics Support Plan | SE-0418:AA | PMA260 | Revised Oct 84 |
| A/S 32M-17 Multi-purpose Aircraft Component Maintenance Crane ILSP | CSE-0645:AA | PMA260 | Approved Apr 88 |
| A/S 32M-17 Maintenance Plan | MaPl-CSE-0645 | PMA260 | Approved Dec 93 |
| A/S 32M-17 Aircraft Maintenance Crane Approved User Logistics Support Summary | CSE-0645 | PMA260 | Approved Jun 94 |

## PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the A/S32M-14 and A/S32M-17 Aircraft Maintenance Cranes, and therefore, are not included in Part IV of this NTSP.

II.A. Billet Requirements

II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule

II.A.2.b. Billets to be Deleted in Operational and Fleet Support Activities

II.A.2.c. Total Billets to be Deleted in Operational and Fleet Support Activities

## PART II - BILLET AND PERSONNEL REQUIREMENTS

### II.A. BILLET REQUIREMENTS

### II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

**SOURCE:** Total Force Maintenance Management System **DATE:** 2/1/99

| ACTIVITY, UIC | | PFYs | CFY00 | FY01 | FY02 | FY03 | FY04 |
|---|---|---|---|---|---|---|---|
| FLEET SUPPORT ACTIVITIES - NAVY | | | | | | | |
| ABFC FMP MMF Hotel Washington D.C. | 68822 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAS Key West | 44320 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAS Weymouth AIMD | 44491 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAS Willow Grove RAIMD | 44493 | 1 | 0 | 0 | 0 | 0 | 0 |
| Naval Test Wing Atlantic | 39782 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAVSTA Roosevelt Roads AIMD | 44373 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAVSTA Rota AIMD | 44374 | 1 | 0 | 0 | 0 | 0 | 0 |
| ABFC FMP Alpha NAS Alameda | 49738 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAF Atsugi AIMD | 44323 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAS North Island | 44326 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAS Whidbey Island | 44329 | 1 | 0 | 0 | 0 | 0 | 0 |
| NAVAIRRES Santa Clara AIMD | 44489 | 1 | 0 | 0 | 0 | 0 | 0 |
| **TOTAL:** | | 12 | 0 | 0 | 0 | 0 | 0 |

**II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES**

| ACTIVITY, UIC, PHASING INCREMENT | BILLETS OFF | BILLETS ENL | DESIG/ RATING | PNEC/ PMOS | SNEC/ SMOS |
|---|---|---|---|---|---|
| FLEET SUPPORT ACTIVITIES - NAVY | | | | | |
| **ABFC FMP MMF Hotel Washington D.C., 68822** | | | | | |
| TAR | 0 | 1 | AS2 | 7613 | 7616 |
| SELRES | 0 | 1 | AS2 | 7607 | 7616 |
| **ACTIVITY TOTAL:** | 0 | 2 | | | |
| **NAS Key West, 44320** | | | | | |
| ACDU | 0 | 1 | AS2 | 7613 | 7616 |
| **ACTIVITY TOTAL:** | 0 | 1 | | | |
| **NAS Weymouth AIMD, 44491** | | | | | |
| SELRES | 0 | 1 | AS2 | 7607 | 7616 |
| **ACTIVITY TOTAL:** | 0 | 1 | | | |
| **NAS Willow Grove RAIMD, 44493** | | | | | |
| TAR | 0 | 1 | AS2 | 7607 | 7616 |
| | 0 | 1 | AS2 | 7613 | 7616 |
| **ACTIVITY TOTAL:** | 0 | 2 | | | |
| **Naval Test Wing Atlantic, 39782** | | | | | |
| ACDU | 0 | 2 | AS2 | 7613 | 7616 |
| | 0 | 2 | AS3 | 7616 | |
| **ACTIVITY TOTAL:** | 0 | 4 | | | |
| **NAVSTA Roosevelt Roads AIMD, 44373** | | | | | |
| ACDU | 0 | 1 | AS3 | 7616 | |
| | 0 | 1 | ASAN | 7616 | |
| **ACTIVITY TOTAL:** | 0 | 2 | | | |
| **NAVSTA Rota AIMD, 44374** | | | | | |
| ACDU | 0 | 1 | AS2 | 7613 | 7616 |
| | 0 | 1 | AS3 | 7616 | |
| **ACTIVITY TOTAL:** | 0 | 2 | | | |
| **ABFC FMP Alpha NAS Alameda, 49738** | | | | | |
| TAR | 0 | 1 | AS2 | 7613 | 7616 |
| SELRES | 0 | 1 | AS2 | 7607 | 7616 |
| **ACTIVITY TOTAL:** | 0 | 2 | | | |

**II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES**

| ACTIVITY, UIC, PHASING INCREMENT | BILLETS OFF | BILLETS ENL | DESIG/ RATING | PNEC/ PMOS | SNEC/ SMOS |
|---|---|---|---|---|---|
| **NAF Atsugi AIMD, 44323** | | | | | |
| ACDU | 0 | 1 | AS3 | 7616 | |
| | 0 | 1 | ASAN | 7616 | |
| **ACTIVITY TOTAL:** | 0 | 2 | | | |
| **NAS North Island, 44326** | | | | | |
| ACDU | 0 | 1 | AS2 | 7613 | 7616 |
| | 0 | 1 | AS2 | 7616 | 9502 |
| | 0 | 1 | AS3 | 7616 | |
| **ACTIVITY TOTAL:** | 0 | 3 | | | |
| **NAS Whidbey Island, 44329** | | | | | |
| ACDU | 0 | 1 | AS1 | 7616 | 9502 |
| | 0 | 1 | AS3 | 7616 | |
| | 0 | 1 | ASAN | 7616 | |
| **ACTIVITY TOTAL:** | 0 | 3 | | | |
| **NAVAIRRES Santa Clara AIMD, 44489** | | | | | |
| TAR | 0 | 1 | AS2 | 7607 | 7616 |
| **ACTIVITY TOTAL:** | 0 | 1 | | | |

**II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES**

| DESIG/ RATING | PNEC/SNEC PMOS/SMOS | PFYs OFF | PFYs ENL | CFY00 OFF | CFY00 ENL | FY01 OFF | FY01 ENL | FY02 OFF | FY02 ENL | FY03 OFF | FY03 ENL | FY04 OFF | FY04 ENL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NAVY FLEET SUPPORT ACTIVITIES - ACDU | | | | | | | | | | | | | |
| AS1 | 7616 9502 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| AS2 | 7613 7616 | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| AS2 | 7616 9502 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| AS3 | 7616 | | | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| ASAN | 7616 | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| NAVY FLEET SUPPORT ACTIVITIES - TAR | | | | | | | | | | | | | |
| AS2 | 7607 7616 | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| AS2 | 7613 7616 | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| NAVY FLEET SUPPORT ACTIVITIES - SELRES | | | | | | | | | | | | | |
| AS2 | 7607 7616 | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

**SUMMARY TOTALS:**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NAVY FLEET SUPPORT ACTIVITIES - ACDU | | | | | | | | | | | | | |
| | | | | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| NAVY FLEET SUPPORT ACTIVITIES - TAR | | | | | | | | | | | | | |
| | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| NAVY FLEET SUPPORT ACTIVITIES - SELRES | | | | | | | | | | | | | |
| | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

**GRAND TOTALS:**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NAVY - ACDU | | | | | | | | | | | | | |
| | | | | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |
| NAVY - TAR | | | | | | | | | | | | | |
| | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| NAVY - SELRES | | | | | | | | | | | | | |
| | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

**II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS**

| DESIG RATING | PNEC/SNEC PMOS/SMOS | | PFYs OFF | PFYs ENL | CFY00 OFF | CFY00 ENL | FY01 OFF | FY01 ENL | FY02 OFF | FY02 ENL | FY03 OFF | FY03 ENL | FY04 OFF | FY04 ENL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TRAINING ACTIVITY, LOCATION, UIC:** MTU 3032 NAMTRAGRU DET, NAS Jacksonville, 66051 | | | | | | | | | | | | | | |
| **INSTRUCTOR BILLETS** | | | | | | | | | | | | | | |
| ACDU | | | | | | | | | | | | | | |
| AS1 | 7616 | 9502 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| **TOTAL:** | | | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| **TRAINING ACTIVITY, LOCATION, UIC:** MTU 3033 NAMTRAGRU DET, NAS North Island, 66065 | | | | | | | | | | | | | | |
| **INSTRUCTOR BILLETS** | | | | | | | | | | | | | | |
| ACDU | | | | | | | | | | | | | | |
| AS1 | 7616 | 9502 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| AS2 | 7616 | 9502 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **TOTAL:** | | | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |

**II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS**

| ACTIVITY, LOCATION, UIC | USN/ USMC | PFYs OFF | PFYs ENL | CFY00 OFF | CFY00 ENL | FY01 OFF | FY01 ENL | FY02 OFF | FY02 ENL | FY03 OFF | FY03 ENL | FY04 OFF | FY04 ENL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTU 3032 NAMTRAGRU DET, NAS Jacksonville, 66051 | | | | | | | | | | | | | |
| | NAVY | | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 |
| MTU 3033 NAMTRAGRU DET, NAS North Island, 66065 | | | | | | | | | | | | | |
| | NAVY | | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 |
| **SUMMARY TOTALS:** | | | | | | | | | | | | | |
| | NAVY | | 1.2 | | 1.2 | | 1.2 | | 1.2 | | 1.2 | | 1.2 |
| **GRAND TOTALS:** | | | | | | | | | | | | | |
| | | | 1.2 | | 1.2 | | 1.2 | | 1.2 | | 1.2 | | 1.2 |

**II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS**

| DESIG/ RATING | PNEC/ PMOS | SNEC/ SMOS | BILLET BASE | CFY00 +/- | CFY00 CUM | FY01 +/- | FY01 CUM | FY02 +/- | FY02 CUM | FY03 +/- | FY03 CUM | FY04 +/- | FY04 CUM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **a. OFFICER - USN** | **NA.** | | | | | | | | | | | | |
| **b. ENLISTED - USN** | | | | | | | | | | | | | |
| Fleet Support Billets ACDU and TAR | | | | | | | | | | | | | |
| AS1 | 7616 | 9502 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| AS2 | 7607 | 7616 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| AS2 | 7613 | 7616 | 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 | 8 |
| AS2 | 7616 | 9502 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| AS3 | 7616 | | 7 | 0 | 7 | 0 | 7 | 0 | 7 | 0 | 7 | 0 | 7 |
| ASAN | 7616 | | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
| Staff Billets ACDU and TAR | | | | | | | | | | | | | |
| AS1 | 7616 | 9502 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 |
| AS2 | 7616 | 9502 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| Chargeable Student Billets ACDU and TAR | | | | | | | | | | | | | |
| | | | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| SELRES Billets | | | | | | | | | | | | | |
| AS2 | 7607 | 7616 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
| **TOTAL USN ENLISTED BILLETS:** | | | | | | | | | | | | | |
| Fleet Support | | | 22 | 0 | 22 | 0 | 22 | 0 | 22 | 0 | 22 | 0 | 22 |
| Staff | | | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 |
| Chargeable Student | | | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| SELRES | | | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 |
| **c. OFFICER - USMC** | **NA.** | | | | | | | | | | | | |
| **d. ENLISTED - USMC** | **NA.** | | | | | | | | | | | | |

## II.B. PERSONNEL REQUIREMENTS

### II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

**CIN, COURSE TITLE:** D-602-7065, Maintenance Crane Intermediate Maintenance Technician
**COURSE LENGTH:** 10.4 Weeks **TOUR LENGTH:** 36 Months
**ATTRITION FACTOR:** Navy: 10% **BACKOUT FACTOR:** 0.17

| TRAINING | | ACDU/TAR | CFY00 | | FY01 | | FY02 | | FY03 | | FY04 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTIVITY | SOURCE | SELRES | OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL |
| MTU 3032 NAMTRAGRU DET, NAS Jacksonville | | | | | | | | | | | | |
| | NAVY | ACDU | | 3 | | 3 | | 3 | | 3 | | 3 |
| | | TAR | | 1 | | 1 | | 1 | | 1 | | 1 |
| | | SELRES | | 0 | | 1 | | 0 | | 0 | | 0 |
| | | TOTAL: | | 4 | | 5 | | 4 | | 4 | | 4 |

**CIN, COURSE TITLE:** E-602-7065, Maintenance Crane Intermediate Maintenance Technician
**COURSE LENGTH:** 10.4 Weeks **TOUR LENGTH:** 36 Months
**ATTRITION FACTOR:** Navy: 10% **BACKOUT FACTOR:** 0.17

| TRAINING | | ACDU/TAR | CFY00 | | FY01 | | FY02 | | FY03 | | FY04 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTIVITY | SOURCE | SELRES | OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL |
| MTU 3033 NAMTRAGRU DET, NAS North Island | | | | | | | | | | | | |
| | NAVY | ACDU | | 3 | | 3 | | 3 | | 3 | | 3 |
| | | TAR | | 1 | | 1 | | 1 | | 1 | | 1 |
| | | SELRES | | 0 | | 0 | | 0 | | 0 | | 0 |
| | | TOTAL: | | 4 | | 4 | | 4 | | 4 | | 4 |

## PART III - TRAINING REQUIREMENTS

The following elements are not affected by the A/S32M-14 and A/S32M-17 Aircraft Maintenance Cranes, and therefore, are not included in Part III of this NTSP.

III.A.1. Initial Training Requirement

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

**III.A.2. FOLLOW-ON TRAINING**

**III.A.2.a. EXISTING COURSES**

**CIN, COURSE TITLE:** D-602-7065, Maintenance Crane Intermediate Maintenance Technician
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

**SOURCE:** NAVY **STUDENT CATEGORY:** ACDU - TAR

| CFY00 | | FY01 | | FY02 | | FY03 | | FY04 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | |
| | 4 | | 4 | | 4 | | 4 | | 4 | ATIR |
| | 4 | | 4 | | 4 | | 4 | | 4 | Output |
| | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 | AOB |
| | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 | Chargeable |

**SOURCE:** NAVY **STUDENT CATEGORY:** SELRES

| CFY00 | | FY01 | | FY02 | | FY03 | | FY04 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | |
| | 0 | | 1 | | 0 | | 0 | | 0 | ATIR |
| | 0 | | 1 | | 0 | | 0 | | 0 | Output |
| | 0.0 | | 0.2 | | 0.0 | | 0.0 | | 0.0 | AOB |
| | 0.0 | | 0.0 | | 0.0 | | 0.0 | | 0.0 | Chargeable |

**CIN, COURSE TITLE:** E-602-7065, Maintenance Crane Intermediate Maintenance Technician
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

**SOURCE:** NAVY **STUDENT CATEGORY:** ACDU - TAR

| CFY00 | | FY01 | | FY02 | | FY03 | | FY04 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | OFF | ENL | |
| | 4 | | 4 | | 4 | | 4 | | 4 | ATIR |
| | 4 | | 4 | | 4 | | 4 | | 4 | Output |
| | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 | AOB |
| | 0.6 | | 0.6 | | 0.6 | | 0.6 | | 0.6 | Chargeable |

## PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the A/S32M-14 and A/S32M-17 Aircraft Maintenance Cranes, and therefore, are not included in Part IV of this NTSP.

IV.A. Training Hardware

IV.A.2. Training Devices

IV.B. Courseware Requirements

IV.B.1. Training Services

IV.C. Facility Requirements

IV.C.1. Facility Requirements Summary (Space / Support) By Activity

IV.C.2. Facility Requirements Detailed By Activity And Course

IV.C.3. Facility Project Summary By Program

## PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

### IV.A. TRAINING HARDWARE

### IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

**CIN, COURSE TITLE:** C-602-3267, A/S32M-14 Aircraft Maintenance Crane Intermediate Maintenance (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| ITEM NUMBER | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQUIRED | DATE REQUIRED | GFE CFE | STATUS |
|---|---|---|---|---|---|
| **TTE** | | | | | |
| 001 | A/S32M-14 Aircraft Maintenance Crane | 1 | Apr 90 | GFE | Onboard |
| 003 | Electro-Hydraulic Control Stick | 1 | Apr 90 | GFE | Onboard |
| 004 | 3 Stage Pump Assembly | 1 | Apr 90 | GFE | Onboard |
| 005 | Lifting Cylinder Balance Valve Check | 1 | Apr 90 | GFE | Onboard |
| 006 | Jack Stands | 4 | Apr 90 | GFE | Onboard |
| 007 | Hydraulic Jack 10 Ton | 1 | Apr 90 | GFE | Onboard |
| 008 | Overload Warning System PMS 7071 Alignment Set | 1 | Apr 90 | GFE | Onboard |
| 010 | Maximizer Test Box T-10199 | 1 | Apr 90 | GFE | Onboard |
| 013 | Converter Valve | 1 | Apr 90 | GFE | Onboard |

**CIN, COURSE TITLE:** C-602-3287, A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane Intermediate (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| ITEM NUMBER | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQUIRED | DATE REQUIRED | GFE CFE | STATUS |
|---|---|---|---|---|---|
| **TTE** | | | | | |
| 002 | A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane | 1 | Mar 94 | GFE | Onboard |
| 009 | Overload Warning System Alignment Set | 1 | Mar 94 | GFE | Onboard |

**IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE**

**CIN, COURSE TITLE:** C-602-3291, A/S 48M-2/3 Servicing Platform Intermediate (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| ITEM NUMBER | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQUIRED | DATE REQUIRED | GFE CFE | STATUS |
|---|---|---|---|---|---|
| **TTE** | | | | | |
| 007 | Hydraulic Jack 10 Ton | 1 | Jan 95 | GFE | Onboard |
| 011 | Trestle 10 Ton Jack Stand | 4 | Jan 95 | GFE | Onboard |
| 012 | Service Platform | 2 | Jan 95 | GFE | Onboard |

**CIN, COURSE TITLE:** C-602-3267, A/S32M-14 Aircraft Maintenance Crane Intermediate Maintenance (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| ITEM NUMBER | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQUIRED | DATE REQUIRED | GFE CFE | STATUS |
|---|---|---|---|---|---|
| **TTE** | | | | | |
| 001 | A/S32M-14 Aircraft Maintenance Crane | 1 | Oct 89 | GFE | Onboard |
| 003 | Electro-Hydraulic Control Stick | 1 | Oct 89 | GFE | Onboard |
| 004 | 3 Stage Pump Assembly | 1 | Oct 89 | GFE | Onboard |
| 005 | Lifting Cylinder Balance Valve Check | 1 | Oct 89 | GFE | Onboard |
| 006 | Jack Stands | 4 | Oct 89 | GFE | Onboard |
| 007 | Hydraulic Jack 10 Ton | 1 | Oct 89 | GFE | Onboard |
| 008 | Overload Warning System PMS 7071 Alignment Set | 1 | Oct 89 | GFE | Onboard |
| 010 | Maximizer Test Box T-10199 | 1 | Oct 89 | GFE | Onboard |
| 013 | Converter Valve | 1 | Oct 89 | GFE | Onboard |

**IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE**

**CIN, COURSE TITLE:** C-602-3287, A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane Intermediate (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| ITEM NUMBER | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQUIRED | DATE REQUIRED | GFE CFE | STATUS |
|---|---|---|---|---|---|
| **TTE** | | | | | |
| 002 | A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane | 1 | May 93 | GFE | Onboard |
| 009 | Overload Warning System Alignment Set | 1 | May 93 | GFE | Onboard |

**CIN, COURSE TITLE:** C-602-3291, A/S 48M-2/3 Servicing Platform Intermediate (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| ITEM NUMBER | EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS | QTY REQUIRED | DATE REQUIRED | GFE CFE | STATUS |
|---|---|---|---|---|---|
| **TTE** | | | | | |
| 007 | Hydraulic Jack 10 Ton | 1 | Jan 95 | GFE | Onboard |
| 011 | Trestle 10 Ton Jack Stand | 4 | Jan 95 | GFE | Onboard |
| 012 | Service Platform | 2 | Jan 95 | GFE | Onboard |

**IV.B. COURSEWARE REQUIREMENTS**

**IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS**

**CIN, COURSE TITLE:** C-602-3267, A/S32M-14 AIRCRAFT Maintenance Crane Intermediate Maintenance (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| TYPES OF MATERIAL OR AID | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|
| Course/Curriculum Outlines | 3 | May 90 | Onboard |
| Instructor Lesson Guides | 3 | May 90 | Onboard |
| Student Guides | 70 | May 90 | Onboard |

**CIN, COURSE TITLE:** C-602-3287, A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane Intermediate Maintenance (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| TYPES OF MATERIAL OR AID | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|
| Course/Curriculum Outlines | 3 | May 98 | Onboard |
| Instructor Lesson Guides | 3 | May 98 | Onboard |
| Student Guides | 70 | May 98 | Onboard |

**CIN, COURSE TITLE:** C-602-3291, A/S 48M-2/3 Servicing Platform Intermediate (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| TYPES OF MATERIAL OR AID | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|
| Course/Curriculum Outlines | 3 | Jan 95 | Onboard |
| Instructor Lesson Guides | 3 | Jan 95 | Onboard |
| Student Guides | 30 | Jan 95 | Onboard |

**CIN, COURSE TITLE:** C-602-3267, A/S32M-14 AIRCRAFT Maintenance Crane Intermediate Maintenance (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| TYPES OF MATERIAL OR AID | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|
| Course/Curriculum Outlines | 3 | Oct 89 | Onboard |
| Instructor Lesson Guides | 4 | Oct 89 | Onboard |
| Student Guides | 20 | Oct 89 | Onboard |

**IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS**

**CIN, COURSE TITLE:** C-602-3287, A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane Intermediate Maintenance (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| TYPES OF MATERIAL OR AID | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|
| Course/Curriculum Outlines | 3 | May 98 | Onboard |
| Instructor Lesson Guides | 4 | May 98 | Onboard |
| Student Guides | 20 | May 98 | Onboard |

**CIN, COURSE TITLE:** C-602-3291, A/S 48M-2/3 Servicing Platform Intermediate (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| TYPES OF MATERIAL OR AID | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|
| Course/Curriculum Outlines | 3 | Jan 95 | Onboard |
| Instructor Lesson Guides | 3 | Jan 95 | Onboard |
| Student Guides | 30 | Jan 95 | Onboard |

**IV.B.3. TECHNICAL MANUALS**

**CIN, COURSE TITLE:** C-602-3267, A/S32M-14 Aircraft Maintenance Crane Intermediate Maintenance (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|---|
| NA17-1-125<br>Ground Support Equipment Cleaning and Corrosion Control | Hard copy | 9 | May 90 | Onboard |
| NA19-25G-16<br>Operation Instructions and Intermediate and Depot Maintenance with Illustrated Parts Break Down Aircraft Maintenance Crane | Hard copy | 9 | May 90 | Onboard |
| NA19-600-196-6-1<br>Preoperational Check List, Aircraft Maintenance Crane Wheel Mounted, 8-1/2 Ton A/S32M-14 Pettibone | Hard copy | 9 | May 90 | Onboard |
| NA19-600-196-6-2<br>Periodic Maintenance Requirements Manual, Aircraft Maintenance Crane Wheel Mounted 8-1/2 A/S32M-14 Pettibone | Hard copy | 9 | May 90 | Onboard |

**CIN, COURSE TITLE:** C-602-3287, A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane Intermediate Maintenance (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|---|
| NA17-1-125<br>Ground Support Equipment Cleaning and Corrosion Control | Hard copy | 9 | May 98 | Onboard |
| NA19-25G-18<br>Operation Instructions and Intermediate and Depot Maintenance with Illustrated Parts Break Down 8-1/2 Ton Aircraft Maintenance | Hard copy | 9 | May 98 | Onboard |
| NA19-600-266-6-1<br>Preoperational Check List, 8-1/2 Ton Aircraft Maintenance Crane A/S32M-17 | Hard copy | 9 | May 98 | Onboard |
| NA19-600-266-6-2<br>Periodic Maintenance Requirements Cards 8-1/2 Ton Aircraft Maintenance Crane A/S32M-17 | Hard copy | 9 | May 98 | Onboard |

**IV.B.3. TECHNICAL MANUALS**

**CIN, COURSE TITLE:** C-602-3291, A/S 48M-2/3 Servicing Platform Intermediate (Track D-602-7065)
**TRAINING ACTIVITY:** MTU 3032 NAMTRAGRU DET
**LOCATION, UIC:** NAS Jacksonville, 66051

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|---|
| NA-01-1A-20<br>Aviation Hose and Tube Manual | Hard copy | 9 | Jan 95 | Onboard |
| NA00-80T-96<br>U. S. Navy Support Equipment Common Basic Handling and Safety | Hard copy | 9 | Jan 95 | Onboard |
| NA01-1A-17<br>Aviation Hydraulics Manual | Hard copy | 9 | Jan 95 | Onboard |
| NA16-1-8.1<br>Aircraft Maintenance Aeronautical Support Equipment Work Unit Manual | Hard copy | 9 | Jan 95 | Onboard |
| NA17-1-125<br>Ground Support Equipment Cleaning and Corrosion Control | Hard copy | 9 | Jan 95 | Onboard |
| NA17-1-129<br>Support Equipment Tire and Wheel Manual | Hard copy | 9 | Jan 95 | Onboard |
| NA19-15-36<br>Technical Manual, Operation and Intermediate Maintenance Instruction with Illustrated Parts Break Down | Hard copy | 9 | Jan 95 | Onboard |
| NA19-600-283-6-1<br>Preoperational Check List A/S48M-2/3 Servicing Platform | Hard copy | 9 | Jan 95 | Onboard |
| NA19-600-283-6-2<br>Technical Manual, Periodic Maintenance Requirements Cards A/S48M-2/3 Servicing Platform | Hard copy | 9 | Jan 95 | Onboard |

**CIN, COURSE TITLE:** C-602-3267, A/S32M-14 Aircraft Maintenance Crane Intermediate Maintenance (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|---|
| NA-00-80T-119<br>Weight Handling Support Equipment | Hard copy | 9 | Oct 89 | Onboard |
| NA17-1-125<br>Ground Support Equipment Cleaning and Corrosion Control | Hard copy | 1 | Jan 95 | Onboard |
| NA19-25G-16<br>Operation Instructions and Intermediate and Depot Maintenance with Illustrated Parts Break Down Aircraft Maintenance Crane | Hard copy | 9 | Oct 89 | Onboard |
| NA19-600-196-6-1<br>Preoperational Check List, Aircraft Maintenance Crane Wheel Mounted, 8-1/2 Ton A/S32M-14 Pettibone | Hard copy | 6 | Oct 89 | Onboard |

**IV.B.3. TECHNICAL MANUALS**

| | | | | |
|---|---|---|---|---|
| NA19-600-196-6-2<br>Periodic Maintenance Requirements Manual, Aircraft Maintenance Crane Wheel Mounted 8-1/2 A/S32M-14 Pettibone | Hard copy | 9 | Oct 89 | Onboard |

**CIN, COURSE TITLE:** C-602-3287, A/S32M-17 8-1/2 Ton Aircraft Maintenance Crane Intermediate Maintenance (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|---|
| NA-00-80T-119<br>Weight Handling Support Equipment | Hard copy | 9 | Oct 89 | Onboard |
| NA17-1-125<br>Ground Support Equipment Cleaning and Corrosion Control | Hard copy | 1 | Jan 95 | Onboard |
| NA19-25G-18<br>Operation Instructions and Intermediate and Depot Maintenance with Illustrated Parts Break Down 8-1/2 Ton Aircraft Maintenance | Hard copy | 6 | May 98 | Onboard |
| NA19-600-266-6-1<br>Preoperational Check List, 8-1/2 Ton Aircraft Maintenance Crane A/S32M-17 | Hard copy | 2 | May 98 | Onboard |
| NA19-600-266-6-2<br>Periodic Maintenance Requirements Cards 8-1/2 Ton Aircraft Maintenance Crane A/S32M-17 | Hard copy | 5 | May 98 | Onboard |

**CIN, COURSE TITLE:** C-602-3291, A/S 48M-2/3 Servicing Platform Intermediate (Track E-602-7065)
**TRAINING ACTIVITY:** MTU 3033 NAMTRAGRU DET
**LOCATION, UIC:** NAS North Island, 66065

| TECHNICAL MANUAL NUMBER / TITLE | MEDIUM | QTY REQD | DATE REQD | STATUS |
|---|---|---|---|---|
| NA00-80T-96<br>U. S. Navy Support Equipment Common Basic Handling and Safety | Hard copy | 1 | Jan 95 | Onboard |
| NA01-1A-17<br>Aviation Hydraulics Manual | Hard copy | 1 | Jan 95 | Onboard |
| NA01-1A-20<br>Aviation Hose and Tube Manual | Hard copy | 1 | Jan 95 | Onboard |
| NA16-1-8.1<br>Aircraft Maintenance Aeronautical Support Equipment Work Unit Manual | Hard copy | 1 | Jan 95 | Onboard |
| NA17-1-129<br>Support Equipment Tire and Wheel Manual | Hard copy | 1 | Jan 95 | Onboard |
| NA19-15-36<br>Technical Manual, Operation and Intermediate Maintenance Instruction with Illustrated Parts Break Down | Hard copy | 10 | Jan 95 | Onboard |

**IV.B.3. TECHNICAL MANUALS**

| | | | | |
|---|---|---|---|---|
| NA19-600-283-6-1<br>Preoperational Check List A/S48M-2/3 Servicing Platform | Hard copy | 8 | Jan 95 | Onboard |
| NA19-600-283-6-2<br>Technical Manual, Periodic Maintenance Requirements Cards A/S48M-2/3 Servicing Platform | Hard copy | 12 | Jan 95 | Onboard |

## PART V - MPT MILESTONES

| COG CODE | MPT MILESTONE | DATE | STATUS |
|---|---|---|---|
| PDA | Awarded A/S32M-14 Production Contract. | FY80 | Completed |
| OPTEVFOR | Completed TECHEVAL. | Mar 82 | Completed |
| PDA | Promulgated A/S32M-14 ILS Master Plan. | May 82 | Completed |
| TSA | Completed A/S32M-14 Training Services. | Jun 82 | Completed |
| PDA | Awarded A/S32M-14Production Contract | FY82 | Completed |
| PDA | Promulgated A/S32M-14 Draft NTP for Review and Comments. | May 83 | Completed |
| PDA | Fleet Introduction A/S32M-14. | Jul 83 | Completed |
| PDA | Submitted Proposed A/S32M-14 NTP to OPNAV. | Sep 83 | Completed |
| TSA | Delivered A/S32M-14 Technical Training Equipment. | FY83 | Completed |
| ACNO | Approved A/S32M-14 NTP. | Jun 84 | Completed |
| PDA | Awarded A/S32M-17 Production Contract. | Feb 88 | Completed |
| PDA | Promulgated A/S32M-17 ILS Master Plan. | Apr 88 | Completed |
| ACNO | Promulgated A/S32M-14 Update NTP. | Sep 89 | Completed |
| TSA | Delivered A/S32M-14 Curricula Materials. | Nov 89 | Completed |
| TA | Began A/S32M-14 Follow-On Training. | Jan 90 | Completed |
| TSA | Began A/S32M-17 Training Services. | Mar 91 | Completed |
| PDA | Fleet Introduction A/S32M-17. | Jun 91 | Completed |
| TSA | Delivered A/S32M-17 Technical Training Equipment. | Jun 91 | Completed |
| PDA | Submitted A/S32M-14 and A/S32M-17 Proposed NTP to OPNAV. | FY91 | Completed |
| OPTEVFOR | Completed A/S32M-17 TECHEVAL. | Aug 92 | Completed |
| ACNO | Approved A/S32M-14 and A/S32M-17 NTP. | FY92 | Completed |
| ACNO | Updated A/S32M-14 and A/S32M-17 NTP. | FY93 | Completed |
| ACNO | Approved A/S32M-17 User Logistic Support Summary | Jun 94 | Completed |
| TSA | Updated A/S32M-14 and A/S32M-17 Draft NTSP. | May 98 | Completed |
| TSA | Delivered A/S32M-17 Curricula Material. | May 98 | Completed |
| TSA | Promulgate A/S32M-14 and A/S32M-17 Draft NTSP. | Jun 99 | Completed |
| ACNO | Promulgate A/S32M-14 and A/S32M-17 Approved NTSP. | Mar 00 | Completed |

## PART VI - DECISION ITEMS / ACTION REQUIRED

| DECISION ITEM OR ACTION REQUIRED | COMMAND ACTION | DUE DATE | STATUS |
|---|---|---|---|

No actions are pending at this time.

## PART VII - POINTS OF CONTACT

| NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL | TELEPHONE NUMBERS |
|---|---|
| **CAPT Owen Fletcher**<br>Deputy Head, Plans, Policy, and Fleet Maintenance Support<br>CNO, N881B<br>fletcher.owen@hq.navy.mil | **COMM:** (703) 604-7747<br>**DSN:** 664-7747<br>**FAX:** (703) 604- 6972 |
| **CAPT Thomas Vandenberg**<br>Head, Aviation Technical Training Branch<br>CNO, N889H<br>vandenberg.thomas@hq.navy.mil | **COMM:** (703) 604-7730<br>**DSN:** 664-7730<br>**FAX:** (703) 604-6939 |
| **LCDR Mike Belcher**<br>NTSP Manager<br>CNO, N889H1<br>belcher.michael@hq.navy.mil | **COMM:** (703) 604-7765<br>**DSN:** 664-7765<br>**FAX:** (703) 604-6939 |
| **AZC Scott Dean**<br>NTSP Manager<br>CNO, N889H7<br>dean.scott@hq.navy.mil | **COMM:** (703) 604-7714<br>**DSN:** 664-7714<br>**FAX:** (703) 604-6939 |
| **LCDR Gary Swain**<br>Aviation Manpower<br>CNO, N122C1<br>n122c1@bupers.navy.mil | **COMM:** (703) 695-3247<br>**DSN:** 225-3247<br>**FAX:** (703) 614-5308 |
| **Mr. Robert Zweibel**<br>Training Technology Policy<br>CNO, N75B<br>zweibel.robert@hq.navy.mil | **COMM:** (703) 614-1344<br>**DSN:** 224-1344<br>**FAX:** (703) 695-5698 |
| **COL Dennis Bartels**<br>Branch Head, USMC Aviation Manpower Management<br>CMC, ASM 1<br>bartelsd@hqmc.usmc.mil | **COMM:** (703) 614-1244<br>**DSN:** 224-1244<br>**FAX:** (703) 614-1309 |
| **Mr. Pat Weaver**<br>Program Manager<br>NAVAIRSYSCOM, PMA260<br>weaverps@navair.navy.mil | **COMM:** (301) 757-6846<br>**DSN:** 757-6846<br>**FAX:** (301) 757 6972 |
| **AMHC Kurt Schweiger**<br>Aviation Training Manager<br>NAVAIRSYSCOM, PMA205-3E2<br>schweigerkw@navair.navy.mil | **COMM:** (301) 757-8145<br>**DSN:** 757-8145<br>**FAX:** (301) 757-8079 |
| **Mr. Greg Pullen**<br>Team Leader<br>NAWCAD Lakehurst, 11X717<br>pulleng@lakehurst.navy.mil | **COMM:** (301) 323-4722<br>**DSN:** 624-4722<br>**FAX:** (732)-323-4029 |

| NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL | TELEPHONE NUMBERS |
|---|---|
| **Mr. Russ Fink**<br>Logistics Manager<br>NAWCAD Lakehurst, 3144<br>finkr4@lakehurst.navy.mil | **COMM:** (732) 323-1816<br>**DSN:** 624- 1816<br>**FAX:** (732)-323-4029 |
| **Mr. Chris Lipuma**<br>Project Engineer<br>NAWCAD Lakehurst, 4825<br>lipumac1@lakehurst.navy.mil | **COMM:** (732) 323-2199<br>**DSN:** 624-2199<br>**FAX:** (732) 323-4917 |
| **CDR Robin Mason**<br>Aviation NTSP Manager<br>CINCLANTFLT, N-721<br>masonrf@clf.navy.mil | **COMM:** (757) 836-0101<br>**DSN:** 836-0101<br>**FAX:** (757) 836-0141 |
| **Mr. Robert Long**<br>Deputy Director for Training<br>CINCPACFLT, N70<br>longrh@cpf.navy.mil | **COMM:** (808) 471-8542<br>**DSN:** 471-8513<br>**FAX:** (808) 471-8596 |
| **ASCS George Lugear**<br>Support Equipment Program Manager<br>COMNAVAIRESFOR, N4333<br>lugeara@cnrf.nola.navy.mil | **COMM:** (504) 678-5916<br>**DSN:** 678-5916<br>**FAX:** (504) 678-6579 |
| **CAPT Patricia Huiatt**<br>Deputy Assistant, Chief of Military Personnel for Distribution<br>NAVPERSCOM, PERS-4B<br>p4b@persnet.navy.mil | **COMM:** (901) 874-3529<br>**DSN:** 882-3529<br>**FAX:** (901) 874-2606 |
| **CDR Timothy Ferree**<br>Branch Head, Aviation Enlisted Assignments<br>NAVPERSCOM, PERS-404<br>p404@persnet.navy.mil | **COMM:** (901) 874-3691<br>**DSN:** 882-3691<br>**FAX:** (901) 874-2642 |
| **MAJ Jon Doering**<br>Total Force Structure Division<br>MCCDC, C5325A<br>doeringj@quantico.usmc.mil | **COMM:** (703) 784-6241<br>**DSN:** 278-6241<br>**FAX:** (703) 784-6072 |
| **CDR Erich Blunt**<br>Aviation Technical Training<br>CNET, ETE32<br>cdr_erich.blunt@smtp.cnet.navy.mil | **COMM:** (850) 452-4915<br>**DSN:** 922-4915<br>**FAX:** (850) 452-4901 |
| **ASCS James Strawderman**<br>Maintenance Training Coordinator<br>NAMTRAGRU HQ, N 5218<br>namtragruhq.n5218@smtp.cnet.navy.mil | **COMM:** (850) 452-9880 ext. 197<br>**DSN:** 922-9880 ext. 197<br>**FAX:** (850) 452-9952 |
| **AS1 Mark Etheridge**<br>Instructor<br>MTU 3032 NAMTRAGRU DET<br>NA | **COMM:** (904) 942-3310<br>**DSN:** 942-3310<br>**FAX:** (904) 942-0056 |

| NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL | TELEPHONE NUMBERS |
|---|---|
| **AS1 Sean Donaway**<br>Instructor<br>MTU 3032 NAMTRAGRU DET<br>NA | **COMM:** (904) 942-3310<br>**DSN:** 942-3310<br>**FAX:** (904) 942-0056 |
| **AS1 Ray Guerrero**<br>Instructor<br>MTU 3033 NAMTRAGRU DET<br>NA | **COMM:** (619) 545-1177<br>**DSN:** 735-1177<br>**FAX:** (619) 545-5592 |
| **AS1 Brian Branam**<br>Instructor<br>MTU 3033 NAMTRAGRU DET<br>NA | **COMM:** (619) 545-1177<br>**DSN:** 735-1177<br>**FAX:** (619) 545-5592 |
| **LCDR Tonya Pringle**<br>PQS Development<br>NETPDTC Pensacola, 034<br>lcdr_tonya.pringle@smpt.cnet.navy.mil | **COMM:** (850) 452-1518<br>**DSN:** 922-1518<br>**FAX:** (850) 452-1057 |
| **Mr. Phil Szczyglowski**<br>Competency Manager<br>NAVAIRSYSCOM, 3.4.1.1<br>szczyglowspr@navair.navy.mil | **COMM:** (301) 757-9182<br>**DSN:** 757-9182<br>**FAX:** (301) 342-4723 |
| **AMCS Wallis Lacey**<br>NTSP Coordinator<br>NAVAIRSYSCOM, 3.4.1.1<br>laceywo@navair.navy.mil | **COMM:** (301) 757-9189<br>**DSN:** 757-9189<br>**FAX:** (301) 342-4723 |
| **AE1 Richard Axtell**<br>MPT Analyst (NTSP Author)<br>NAVAIRSYSCOM, 3.4.1.1<br>axtellra@navair.navy.mil | **COMM:** (732) 757-9187<br>**DSN:** 757-9187<br>**FAX:** (301) 342-4723 |